REMARKS

Claims 1-7, 9-22 and 24-39 are currently pending in the subject application and are presently under consideration. Favorable reconsideration of the subject patent application is respectfully requested in view of the comments herein.

I.   **Rejection of Claims 1, 2, 4-5, 9, 18-20 and 33-35 Under 35 U.S.C. §103(a)**

Claims 1, 2, 4-5, 9, 18-20 and 33-35 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Runyon *et al.* (E.P. 1 104 141) in view of Graves *et al.* (US 2002/0191250). Withdrawal of this rejection is requested for at least the following reasons. Neither Runyon *et al.* nor Graves *et al.*, teach or suggest all limitations of the subject claims.

> To reject claims in an application under §103, an examiner must establish a *prima facie* case of obviousness. A *prima facie* case of obviousness is established by a showing of three basic criteria. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second there must be a reasonable expectation of success. Finally, *the prior art reference (or references when combined) must teach or suggest all the claim limitations*. *See* MPEP §706.02(j). The teaching or suggestion to make the claimed combination and the reasonable expectation of success must be found in the prior art and not based on the Applicant's disclosure. *See In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

The claimed invention relates to a system and method to facilitate optimized data transfers between an industrial controller and one or more remote client applications. In particular, independent claims 1 and 33 recite similar limitations, namely an industrial control system comprising a primary aggregation component associated with an industrial controller, the primary aggregation component aggregates one or more selected data items into an aggregated subset of data items, *the primary aggregation component defined and installed by an entity remote from the controller.* Runyon *et al.* and Graves *et al.*, either alone or in combination, fail to disclose or suggest such recited features.

Runyon *et al.* teaches a system that generates composite packets for transmission over an

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internet protocol network. Data communications originating from multiple customer equipments towards a single destination are processed and combined into a composite packet for transmission over an IP network. In the Advisory Action, the Examiner incorrectly asserts that Runyon *et al.* teaches *a primary aggregation component defined and installed by an entity remote from an industrial controller.* At the indicated portions, the reference teaches a composite packet generation system that aggregates a plurality of data packets into a single packet and assigns a protocol header to facilitate transmission. However, the reference does not provide the mechanism of aggregating data that the claimed invention provides through an aggregation component that is defined and installed by an entity that is remote from the industrial controller. In particular, for example, the claimed invention allows a remote entity to specify data items that the remote entity would like retrieved from the industrial controller and collected at the remote entity-defined aggregation component, while the cited reference merely aggregates data packets and facilitates transmission of a single bulk data packet. Nowhere does the reference further teach or suggest that the aggregated data packets contain data that was gathered specifically according to what a remote entity identified for collection.

The Examiner attempts to compensate for deficiencies of Runyon *et al.* with Graves *et al.* Graves *et al.* provides a communication network for a metropolitan area comprised of three types of nodes. Graves *et al.* does not teach or suggest aggregating remote entity-defined data items at an industrial controller. Consequently, Graves *et al.* fails to provide the optimized transmission of desired data as afforded by the claimed invention *via a primary aggregation component defined and installed by an entity remote from an industrial controller.*

In view of at least the foregoing, it is readily apparent that Runyon *et al.* and Graves *et al.*, either alone or in combination, fail to teach or suggest each and every element set forth in the subject claims. Accordingly, this rejection should be withdrawn.

II.   Rejection of Claims 6, 7 and 16 Under 35 U.S.C. §103(a)

Claims 6, 7 and 16 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Runyon *et al.*, in view of Graves *et al.* and in further view of Bowman-Amuah (US 6,640,244). This rejection should be withdrawn for at least the following reasons. Claims 6, 7 and 16 depend from independent claim 1. As discusses *supra*, Runyon *et al.* and Graves *et al.* fail to teach or suggest all features of independent claim 1, and Bowman-Amuah fails to compensate for the

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aforementioned deficiencies of the primary references. Accordingly, this rejection should be withdrawn.

III.   Rejection of Claim 10 Under 35 U.S.C. §103(a)

Claim 10 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Runyon *et al.*, in view of Graves *et al.* and further in view of Su *et al.* (US 6,625,161). Withdrawal of this rejection is requested for at least the following reasons. The cited references, individually or in combination, do not teach or suggest each and every element set forth in the subject claim. In particular, Su *et al.* does not make up for the deficiencies of Runyon *et al.* and Graves *et al.* with respect to independent claim 1 (from which claim 10 depends). Thus, it is respectfully submitted that this rejection be withdrawn.

IV.   Rejection of Claims 11-13, 15 and 17 Under 35 U.S.C. §103(a)

Claims 11-13, 15 and 17 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Runyon *et al.*, in view of Graves *et al.* and in further view of Bonneau *et al.* (US 6,657,955). Withdrawal of this rejection is requested for at least the following reasons. Runyon *et al.*, Graves *et al.* and Bonneau *et al.*, individually or in combination, do not teach or suggest each and every element set forth in the subject claims. In particular, Bonneau *et al.* does not make up for the deficiencies of the primary references with respect to independent claim 1 (from which claims 11-13, 15 and 17 depend from). Therefore, withdrawal of this rejection is respectfully requested.

V.   Rejection of Claim 14 Under 35 U.S.C. §103(a)

Claim 14 stands rejected under 35 U.S.C. §103(a) as being unpatentable Runyon *et al.*, Graves *et al.* Bonneau, *et al.* and in further view of Bhatt *et al.* (US 6,097,399). Withdrawal of this rejection is requested for at least the following reasons. The cited references, either alone or in combination, fail to teach or suggest all features set forth in the subject claim. In particular, Bhatt *et al.* does not make up for the aforementioned deficiencies of Runyon *et al.*, Graves *et al.* and Bonneau *et al.* with respect to independent claim 1 (from which claim 14 depends from). Accordingly, this rejection should be withdrawn.

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VI.   Rejection of Claim 3 Under 35 U.S.C. §103(a)

Claim 3 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Runyon *et al.*, Graves *et al.* and further in view of Bhatt *et al.* This rejection should be withdrawn for at least the following reasons. The cited documents, individually or in combination, do not teach or suggest each and every element set forth in the subject claim. In particular, Bhatt *et al.* does not make up for the aforementioned deficiencies of the primary references with respect to independent claim 1 (from which claim 3 depends from). Therefore, applicants' representative respectfully requests that this rejection be withdrawn.

VII.   Rejection of Claims 21-24 and 27-32 Under 35 U.S.C. §103(a)

Claims 21-24 and 27-32 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Bowman-Amuah in view of Wang *et al.* (US 6,970,921). Withdrawal of this rejection is requested for at least the following reasons. Neither Bowman-Amuah nor Wang *et al.* teach or suggest all aspects set forth in the subject claims.

Independent claims 21 recites a method to facilitate data communications with an industrial controller, comprising *requesting tag information from a controller; building an object from the tag information provided by the controller; installing the object on the controller; updating object data on the controller.* Independent claims 31 and 32 recite similar features. Bowman-Amuah and Wang *et al.* are silent regarding such aspects set forth in the subject claims.

Bowman-Amuah provides a system for batching logical requests for reducing network traffic in a transaction services environment. In the Advisory Action, the Examiner contends that the grouping of streams of data packets into an associated queue based on an identified predetermined common attribute as taught by Bowman-Amuah equates to the features afforded by independent claims 21, 31 and 32. Applicants' representative respectfully disagrees. Rather than performing the rudimentary task of organizing data packets according to a common attribute as in the cited reference, the claimed invention allows a remote application to build and subsequently install an object at an industrial controller that allows for aggregation and updating of desired data items. Thus, Bowman-Amuah is directed towards organizing previously collected data according to an identified attribute while the claimed invention identifies attributes in order to facilitate collection of desired data. Consequently, the cited reference is silent

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regarding *requesting tag information from a controller; building an object from the tag information provided by the controller; installing the object on the controller; updating object data on the controller*, as in the claimed invention.

The Examiner attempts to compensate for the deficiencies of Bowman-Amuah with Wang *et al.* Wang *et al.* employs network interface cards with multiple virtual paths in order to manage network traffic. However, nowhere does Wang *et al.* construct an object based on tag information associated with desired data items to facilitate single transmission of the desired data items to the requesting remote entity. Consequently, Wang *et al.* is silent regarding *requesting tag information from a controller, building an object from the tag information provided by the controller, installing the object, updating the object data, adding data items of interest to the object, the data items arranged according to at least one of contiguous and non-contiguous address memory locations and receiving data from the object that has been updated by the controller,* as in the claimed invention.

Moreover, the cited references do not teach or suggest *employing handle information to update memory locations on the controller*, as recited in claim 30. In the Advisory Action, the Examiner incorrectly states that the ability of Bowman-Amuah to subsequently add data packets to the queue equates to *employing handle information to update memory locations on the controller*, as afforded by claim 30. The claimed invention, for example, allows a remote application to receive handle information relating to one or more data items of interest from the controller, and subsequently allows the remote application to locally update the data items and employ the handle information to transmit the updates to the controller. To the contrary, Bowman-Amuah allows the queue of aggregated data packets to be expanded with additional data packets. Furthermore, since neither Bowman-Amuah nor Wang *et al.* teach constructing an object at the industrial controller based on tag information associated with data items desired by a remote entity, the cited references are further silent with regard to employing the updating procedure as afforded by claim 30.

In view of at least the foregoing, it is readily apparent that Bowman-Amuah and Wang *et al.*, either alone or in combination, fail to teach or suggest each and every element set forth in the subject claims. Accordingly, this rejection with respect to independent claims 1, 21 and 32 (and the claims that depend there from) should be withdrawn.

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VIII. Rejection of Claims 25-26 Under 35 U.S.C. §103(a)

Claims 25-26 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Bowman-Amuah, Wang *et al.* and in further view of Graves *et al.* Withdrawal of this rejection is requested for at least the following reasons. As discussed *supra* with regard to independent claim 21, neither Bowman-Amuah nor Wang *et al.*, individually or in combination, teach or suggest all aspects recited in the subject claims. Graves *et al.* does not make up for the deficiencies of Bowman-Amuah and Wang *et al.* with respect to independent claim 21 (from which claims 25 and 26 depend from). Thus, it is respectfully submitted that this rejection be withdrawn.

IX. Rejection of Claim 36 Under 35 U.S.C. §103(a)

Claim 36 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Bowman Amuah, Wang *et al.* and in further view of Smith-Semedo *et al.* (US 6,877,010). Withdrawal of this rejection is requested for at least the following reasons. The cited references, individually or in combination, do not teach or suggest all aspects recited in the subject claims. In particular, Smith-Semedo *et al.* does not make up for the aforementioned deficiencies of Bowman-Amuah and Wang *et al.* Therefore, this rejection should be withdrawn.

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CONCLUSION

The present application is believed to be in condition for allowance in view of the above comments. A prompt action to such end is earnestly solicited.

In the event any fees are due in connection with this document, the Commissioner is authorized to charge those fees to Deposit Account No. 50-1063 [ALBRP284US].

Should the Examiner believe a telephone interview would be helpful to expedite favorable prosecution, the Examiner is invited to contact applicants' undersigned representative at the telephone number below.

Respectfully submitted,

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